

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
ETC Annual Reports and Certifications	)	WC Docket No. 14-58
	)	
Rural Broadband Experiments	)	WC Docket No. 14-259
	)	

To: The Commission

**COMMENTS OF HUGHES NETWORK SYSTEMS, LLC**

Hughes Network Systems, LLC (“Hughes”) hereby submits these comments in response to the further notice of proposed rulemaking on rules and procedures for the Connect America Fund (“CAF”) Phase II competitive bidding process.<sup>1</sup>

Hughes is the nation’s leading provider of satellite consumer broadband services, currently serving over one million customers, principally in rural and remote areas. Later this year, Hughes will launch a second next-generation broadband satellite, Jupiter 2, which will provide advanced satellite broadband coverage across the United States, increase the speeds that Hughes is able to offer to upwards of 25 Mbps and beyond, and increase the Hughes’s capacity to provide service to customers. In addition, Hughes is planning its Jupiter 3 network and plans to launch it by the end of the decade.

As a leading provider of broadband service to consumers in rural and remote areas in the United States, Hughes has engaged extensively in this proceeding as the Commission has sought

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<sup>1</sup> *Connect America Fund; ETC Annual Reports and Certifications; Rural Broadband Experiments*, WC Docket Nos. 10-90, 14-58, 14-259, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949 (2016) (“Order” or “FNPRM,” as applicable).

to develop an appropriate and efficient mechanism for ensuring that all Americans have access to the benefits of broadband. In particular, Hughes has offered specific proposals to allow the Commission to balance key service characteristics, including speed, capacity, and latency.<sup>2</sup> Significant elements of these proposals can be seen in the service tiers matrix that the Commission adopted in the Order.<sup>3</sup>

In these comments, Hughes urges the FCC to begin its weighting process by determining, based on the bids received, if there is sufficient funding available within the budget to provide CAF funding to all unserved locations at the baseline levels adopted in the recent Order. Only if the funding available for award exceeds this amount should the Commission weight bids within each tier. If weighting is applied, these comments discuss how to apply the principles from Hughes's earlier proposals to weight bids within the context of the service tier framework that the Commission has adopted. Hughes also supports proposals to provide bid credits (or additional weighting) to bids proposing to serve Tribal Lands.

#### **I. THE FIRST STEP IN THE WEIGHTING PROCESS SHOULD CONSIDER THE SUFFICIENCY OF FUNDING AVAILABLE FOR WEIGHTING**

The Commission seeks comment on “how bids should be weighted in order to achieve [its] overarching goal of providing households in the relevant high-cost areas with access to high quality broadband services, while making the most efficient use of finite universal service funds.”<sup>4</sup> As a result, the first step in the weighting process should consider how much funding is available to weight bids. It is important to remember that weighting a bid effectively makes that

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<sup>2</sup> See, e.g., Letter from Jennifer Manner, Hughes, to Marlene Dortch, FCC, WC Docket No. 10-90 (filed March 4, 2016).

<sup>3</sup> Order at ¶ 15.

<sup>4</sup> Order at ¶ 207.

bid appear more cost-effective than it really is. The Commission therefore must guard against an outcome where funding is channeled to provide above-baseline service to some customers while others are left entirely unserved.

In this first step of the weighting process, the Commission should consider whether sufficient funding is available to fund bids at the baseline service tier to serve all eligible locations in the auction for which bids were received. If not, the Commission cannot provide additional weight to bids without leaving some customers without service. In that case, the weighting plan should not apply additional weights to bids above the baseline tier.

## **II. THE COMMISSION SHOULD WEIGHT BIDS IN INCREMENTS RELATIVE TO THE MINIMUM SERVICE AND LATENCY TIERS**

If sufficient funding is available, as discussed above, the Commission should apply specified weights to bids within each of the four service tiers, and two latency levels, that the Commission has adopted. Although Hughes's earlier proposals, by allowing speed, capacity, and latency all to be balanced against one another, may have led to more efficient auction results, it is possible to develop an efficient weighting mechanism within the structure set out in the Order.

Given the Commission's focus on simplicity, Hughes proposes that bid weights be applied relative to the minimum tier. In other words, bids in the minimum tier will not be weighted, and bids in each higher tier will receive successively higher weights. This is simpler than applying the weights relative to one of the intermediate tiers, because it avoids the need to apply both negative and positive weights. This more linear structure should facilitate the evaluation of bids.

Hughes proposes to weight bids in each tier above the minimum tier by 10 percent of the subsidy amount per unit bid, or less. In other words, bids in the baseline tier would receive a 10

percent bidding credit; bids in the above-baseline tier would receive a 20 percent bidding credit; and bids in the gigabit tier would receive a 30 percent credit.

The credit would effectively reduce the dollar value of the bid. In other words, if a bidder in the above-baseline tier (20 percent credit) offered a bid of \$100, that bid would be treated in the auction as a bid at \$80. The bidder's weighted bid of \$80 would then be compared to the reserve price for the census tract in order to rank the bid in the auction.<sup>5</sup>

The Commission should take the same approach in applying weights for latency. That is, bids in the high latency category should receive no bidding credit, and bids in the low latency category should receive a 10 percent credit off of the amount bid. So, as above, a bid in the high latency category at \$100 would be ranked in the auction at \$100, while a bid at \$100 in the low latency category would be ranked in the auction at \$90.

This structure can be illustrated building on the charts from the Order as follows:

Performance Tier	Speed	Usage Allowance	Weight
<b>Minimum</b>	≥ 10/1 Mbps	≥150 GB	0 (at bid amount)
<b>Baseline</b>	≥25/3 Mbps	≥150 GB or U.S. median, whichever is higher	-10% of bid amount
<b>Above Baseline</b>	≥100/20 Mbps	Unlimited	-20% of bid amount
<b>Gigabit</b>	≥1 Gbps/500 Mbps	Unlimited	-30% of bid amount

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<sup>5</sup> Order at ¶ 85 (“Bids will be scored relative to the reserve price for the areas subject to the bid with lower bids selected first, taking into accounts the weights....”).

Latency	Requirement	Weight
Low Latency	$\leq 100$ ms	-10% of bid amount
High Latency	$\leq 750$ ms & MOS of $\geq 4$	0 (at bid amount)

This approach will allow the Commission to achieve its “overarching goal of providing households in the relevant high-cost areas with access to high quality broadband services, while making the most efficient use of finite universal service funds.”<sup>6</sup> At the same time, this approach is relatively simple to implement. As a result, it can be built into auction software without undue computational difficulty.

### III. THE COMMISSION SHOULD PROVIDE BIDDING CREDITS FOR BIDS PROPOSING TO SERVE TRIBAL LANDS

The Commission has noted repeatedly that Americans living on Tribal Lands have significantly lower levels of access to the benefits of broadband than those living in other areas. The Commission recently found that fully 41 percent of residents of Tribal Lands lack access to advanced telecommunications capability, compared to only 4 percent of residents of urban areas.<sup>7</sup> This was an element of the Commission’s conclusion that advanced telecommunications capabilities are not being deployed in a reasonable and timely fashion.<sup>8</sup> The FNPRM also notes that the Government Accountability Office recently released a report recommending that the

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<sup>6</sup> Order at ¶ 207.

<sup>7</sup> *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, 2016 Broadband Progress Report, 31 FCC Rcd 699, 701 ¶ 4 (2016).

<sup>8</sup> *Id.*

Commission take additional steps to achieve the strategic objective of making broadband available to households on Tribal Lands.<sup>9</sup>

In order to maximize the effectiveness of the CAF Phase II competitive bidding process at ensuring the availability of broadband in Tribal areas, the Commission should provide an additional bidding weight to bids proposing to serve Tribal lands. For example, the Commission could apply the same 10 percent bidding credit increment used to weight bids within each performance tier, as discussed above, to bids proposing service on Tribal Lands. In other words, if a bidder proposing service to a census tract on Tribal Land bids \$100, that bid would be treated in the auction as a bid at \$90 following application of the Tribal 10 percent weighting factor. The bid would then be compared to the reserve price for that census tract to rank it in the auction.

In the event that a bid includes areas that are both within and outside of Tribal Lands, the bidding credit would apply only to the portion of the bid area that is within Tribal Lands. In other words, if a bid covered eight census tracts, of which five were on Tribal Lands and three were not, the bidding credit would reduce the bid only in the Tribal census tracts. The reduction would be applied proportionally based on the number of covered locations within each census tract.

Given the importance of extending the benefits of broadband to Tribal areas, the Tribal bidding credit could be greater than 10 percent (e.g., 20 percent or 25 percent).

#### **IV. CONCLUSION**

In order to achieve the Commission's objective of providing high-quality broadband services to as many Americans as possible within the CAF Phase II budget, the Commission

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<sup>9</sup> Government Accountability Office, Additional Coordination and Performance Measurement Needed for High-Speed Internet Access Programs on Tribal Lands (GAO 16-222) at 30 (Jan. 2016).

